

What is claimed is:

1. A retractor for illuminating a surgical space, comprising:
a body extending between a distal end and a proximal end and defining a working channel for receiving at least one surgical instrument therethrough, said body comprised of light transmittable material, said body including a coupling portion for receiving light from a light source for transmission of light into said body, said body including a light emitting surface formed by a discontinuity in an inner wall surface of said body in communication with said working channel for reflection of light from said body into said working channel.
2. The retractor of claim 1, wherein said body is a tube and said working channel is enclosed by said tube.
3. The retractor of claim 1, wherein said body includes a concavely curved surface defining said working channel.
4. The retractor of claim 1, wherein said light emitting surface includes a recess in said inner wall surface of said body adjacent said working channel.
5. The retractor of claim 4, wherein said body is tubular and said recess extends about said working channel.
6. The retractor of claim 5, wherein said light emitting surface is spaced proximally from said distal end of said body.

7. The retractor of claim 4, wherein said light emitting surface includes a proximal surface portion and a distal surface portion.

8. The retractor of claim 7, wherein said proximal and distal surface portions form a V-shape.

9. The retractor of claim 1, wherein said light emitting surface includes at least one protrusion extending transversely to a longitudinal axis of said body and into said working channel

10. The retractor of claim 9, wherein said body is tubular and said inner wall surface extends around said working channel.

11. The retractor of claim 10, wherein said at least one protrusion forms a ring extending around said working channel.

12. The retractor of claim 11, wherein said at least one protrusion comprises a series of two or more protrusions adjacent one another.

13. The retractor of claim 9, wherein said at least one protrusion includes an outer surface convexly curved in a direction between said distal end and said proximal end of said body.

14. The retractor of claim 9, wherein said at least one protrusion is spaced a distance from said distal end.

15. The retractor of claim 1, wherein said light transmitting material is plastic.

16. The retractor of claim 1, wherein said body includes an outer surface masked along at least a portion of a length of said body between said distal end proximal ends to prevent light from transmitting through said masked outer surface portion.

17. The retractor of claim 1, wherein said proximal coupling portion includes a ring portion extending about said proximal end of said body and an extension portion extending from said ring portion for coupling with said light source.

18. The retractor of claim 1, wherein said body includes an outer wall surface opposite said inner wall surface, said distal end and including a first surface portion extending from said outer wall surface toward said inner wall surface and a convexly curved second surface portion extending from said first portion to said inner wall surface.

19. The retractor of claim 18, wherein said body is tubular and said working channel is enclosed by said inner wall surface.

20. The retractor of claim 19, wherein said first surface portion is orthogonally oriented relative to said outer wall surface.

21. A retractor for illuminating a surgical space, comprising:
a tubular body extending between a distal end and a proximal end, said body including an inner wall surface defining a working channel for receiving at least one surgical

instrument therethrough, said body comprised of light transmittable material and including a light emitting surface on said inner wall surface in communication with said working channel, said light emitting surface being spaced a distance from said distal end to focus light from said body into said working channel.

22. The retractor of claim 21, wherein said working channel includes a circular shape cross-section transversely to a longitudinal axis of said body.

23. The retractor of claim 21, wherein said light emitting surface includes a recess in said inner wall surface.

24. The retractor of claim 23, wherein said light emitting surface includes a proximal surface portion and a distal surface portion.

25. The retractor of claim 24, wherein said proximal and distal surface portions form a V-shape.

26. The retractor of claim 23, wherein said recess is orthogonally oriented relative to a longitudinal axis of said body.

27. The retractor of claim 26, wherein said recess extends completely about said working channel.

28. The retractor of claim 21, wherein said light emitting surface includes at least one protrusion extending from said inner surface into said working channel

29. The retractor of claim 28, wherein said at least one protrusion extends around said working channel.

30. The retractor of claim 28, wherein said at least one protrusion comprises a series of two or more protrusions adjacent one another and extending about said working channel and spaced along said inner wall surface of said body.

31. The retractor of claim 28, wherein said at least one protrusion includes an outer surface convexly curved in the direction between said distal end and said proximal end of said body.

32. The retractor of claim 21, wherein said body comprises a proximal coupling portion including a ring portion extending about said proximal end of said body and an extension portion extending from said ring portion for coupling with a light source.

33. The retractor of claim 21, wherein said body includes an outer wall surface, said distal end including a first surface portion extending from said outer surface toward said inner surface and a convexly curved second surface portion extending from said first portion to said inner wall surface.

34. The retractor of claim 33, wherein said first surface portion is orthogonally oriented to said outer surface.

35. A retractor for illuminating a surgical space, comprising:

a tubular body extending between a distal end and a proximal end, said body including an inner wall surface defining a working channel for receiving at least one surgical instrument therethrough, said body comprised of light transmittable material and including at least one light transmitter in a wall of said body to transmit light along said body and into said working channel, wherein said at least one light transmitter is radially dispersed about said tubular body.

36. The retractor of claim 35, wherein said at least one light transmitter includes a plurality of light transmitters radially spaced about and axially extending along said tubular body.

37. The retractor of claim 35, wherein said at least one light transmitter extends circumferentially about said tubular body.

38. The retractor of claim 35, wherein said at least one light transmitter extends spirally about said tubular body.

39. The retractor of claim 35, wherein said at least one light transmitter is an optical fiber.

40. A system for illuminating a surgical space, comprising:
a retractor comprised of light transmittable material, said retractor extending between a distal end and a proximal end and defining a working channel for receiving at least one surgical instrument therethrough and a proximal coupling portion, said retractor further

including an inner wall surface extending about said working channel and a discontinuity in said inner wall surface to direct light into said working channel;

a light source operable to generate light; and

a link coupling said light source to said coupling portion of said retractor to deliver light thereto for transmission of light through said retractor and into said working channel.

41. The system of claim 40, wherein said light transmitting material is plastic.

42. The system of claim 40, wherein said body includes an outer surface masked along at least a portion thereof to prevent light transmission through said outer surface.

43. The system of claim 40, wherein said proximal coupling portion includes a ring portion extending about said proximal end of said body and an extension portion extending from said ring portion for coupling with said light source.

44. The system of claim 40, wherein said link includes a plurality of optical fibers.